

## REMARKS

Claims 1-44 were previously pending in this patent application. Claims 1-44 stand rejected. Herein, Claims 1, 8, 15, 24, 25, and 35 have been amended. Accordingly, after this Amendment and Response After Final Action, Claims 1-44 remain pending in this patent application. Further examination and reconsideration in view of the claims, remarks, and arguments set forth below is respectfully requested.

### 35 U.S.C. Section 103(a) Rejections

Claims 1-44 stand rejected under 35 U.S.C. Section 103(a) as being unpatentable over Ice, U.S. Pat. No. 5,884,031 (hereafter Ice), in view of Ishida, U.S. Pat. No. 6,122,259 (hereafter Ishida), and in view of Chaudhuri, U.S. Pat. No. 6,600,719 (hereafter Chaudhuri). These rejections are respectfully traversed.

Claim 1 recites:

A method of communicating broadcast information comprising the steps of:

- a) causing a server to communicate a first stream representing digital broadcast information to a first user device wherein said server and said first user device are coupled to the Internet;
- b) causing said server to communicate a second stream representing said broadcast information to a second user device wherein said second user device is coupled to the Internet;
- c) causing said first user device to communicate a third stream representing said broadcast information to a third user device wherein said third user device is coupled to the Internet;
- d) receiving and rendering, concurrently, said broadcast information on said first, second and third user devices, wherein said user devices form one or more communication chains, wherein each communication chain has one or more tiers, and wherein a sum of user devices in corresponding tiers of said communication chains is variable; and
- e) **for each user device, registering with** and periodically sending status update messages to **a transmission scheduler that is separate from said server and said user devices**, wherein said transmission scheduler actively monitors, manages, and **initiates failure-based and performance-based changes in said communication chains** among said server and said user devices. (emphasis added)

It is respectfully asserted that the combination of Ice, Ishida, and Chaudhuri does not teach, suggest, or motivate the present invention as recited in Independent Claim 1. In particular, Independent Claim 1 recites the limitations, "***for each user device, registering with and periodically sending status update messages to a transmission scheduler that is separate from said server and said user devices***," (emphasis added), and "***transmission scheduler actively monitors, manages, and initiates failure-based and performance-based changes in said communication chains*** among said server and said user devices," (emphasis added). In contrast, it is admitted in the Final Office Action at page 5 that Ice does not teach the technique of a user device registering with and periodically sending status update messages to a transmission scheduler. Further, Ishida is used to support the teaching of providing simultaneous reception and display. However, Ishida fails to teach, suggest, or motivate technique of a user device registering with and periodically sending status update messages to a transmission scheduler. Moreover, it is admitted in the Final Office Action at page 5 that Chaudhuri teaches a different technique. Official Notice is taken that terminals or nodes periodically transmitting their operating status to a central location was very well known in the art at the time the invention was made. This Official Notice is respectfully traversed. It was not well known in the art at the invention was made that terminals or nodes periodically transmitted their operating status to a transmission scheduler that actively monitors, manages, and initiates failure-based and performance-based changes in the communication chains among the server and the user devices, as in the invention of Independent Claim 1. That is, the Independent Claim 1 is directed to a transmission scheduler instead of simply a central location identified as a network manager at page 6 of the Final Office Action.

Continuing, Chaudhuri is cited as teaching a method of restoring communication in a network when a node failure has been detected. Chaudhuri discloses techniques to respond to link failures and node failures. In particular, Chaudhuri discloses one embodiment where a network restoration module (NRM) (38) runs as an individual process in each node and does not require a central controller. [Chaudhuri; Col. 5, line 66 through Col. 6, line 5]. Chaudhuri also discloses another embodiment where a Network Management System (NMS) can be used as a central location to facilitate certain functions of the NRM (38) running in each node. Id. That is, Chaudhuri is directed to restoration techniques that are controlled and initiated by each node (via the NRM (38)) or by each node (via the NRM (38)) and the NMS. Unlike Chaudhuri, the Independent Claim 1 recites a transmission scheduler that is separate from the server and the user devices (or nodes). Moreover, the transmission scheduler actively monitors, manages, and initiates failure-based and performance-based changes in the communication chains among the server and the user devices. Also, while Chaudhuri discloses techniques to respond to link failures and node failures and fails to disclose techniques to respond to link performance and node performance, the transmission scheduler initiates failure-based and performance-based changes in the communication chains among the server and the user devices. Furthermore, Ice and Ishida do not disclose a transmission scheduler that is separate from the server and the user devices and that actively monitors, manages, and initiates failure-based and performance-based changes in the communication chains among the server and the user devices, as in the invention of Independent Claim 1. Therefore, it is respectfully submitted that Independent Claim 1 is patentable over the combination of Ice, Ishida, and Chaudhuri and is in condition for allowance.

Dependent Claims 2-7 are dependent on allowable Independent Claim 1, which is allowable over the combination of Ice, Ishida, and Chaudhuri. Hence, it is respectfully submitted that Dependent Claims 2-7 are patentable over the combination of Ice, Ishida, and Chaudhuri for the reasons discussed above.

With respect to Independent Claims 8, 15, 24, and 35, it is respectfully submitted that Independent Claims 8, 15, 24, and 35 recite similar limitations as in Independent Claim 1. Therefore, Independent Claims 8, 15, 24, and 35 are allowable over the combination of Ice, Ishida, and Chaudhuri for reasons discussed in connection with Independent Claim 1.

Dependent Claims 9-14, Dependent Claims 16-23, Dependent Claims 25-34, and Dependent Claims 36-44 are dependent on allowable Independent Claims 8, 15, 24, and 35 respectively, which are allowable over the combination of Ice, Ishida, and Chaudhuri. Hence, it is respectfully submitted that Dependent Claims 9-14, Dependent Claims 16-23, Dependent Claims 25-34, and Dependent Claims 36-44 are patentable over the combination of Ice, Ishida, and Chaudhuri for the reasons discussed above.

## CONCLUSION

It is respectfully submitted that the above claims, arguments and remarks overcome all rejections. All remaining claims (Claims 1-44) are neither anticipated nor obvious in view of the cited references. For at least the above-presented reasons, it is respectfully submitted that all remaining claims (Claims 1-44) are in condition for allowance.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

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Respectfully submitted,

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